

for: GENERAL INSTRUMENT CORPORATION
(Radio Receptor Division)

► release date: IMMEDIATE (1/27/65)

NEW DELAY LINES USE MICROELECTRONIC READ-WRITE CIRCUITS

Microminiature Units, Only 2 Inches in Diameter, Designed for Space Use

A unique series of microminiature delay lines -- whose associated Read-Write amplifier circuits are in microelectronic form, and are built into the delay line package itself -- has been developed by General Instrument Corporation (Radio Receptor Division) for aerospace, ground support and other critical military and commercial applications where size, weight and shock are important factors.

Designated the MMDL series, the new magnetostrictive delay lines are only 2 inches in diameter (about the size of a silver dollar), only 1/2 inch high, including 7-pin connector, and weigh less than 1-1/2 ounces. They are available in delay ranges of 10 to 500 microseconds, and are longitudinal in type.

The delay lines employ a recently-developed General Instrument method of "soft encapsulation" of the entire media package,

- more -

which provides extraordinary high shock and vibration performance. The devices, under test, operate dynamically at shocks of over 100 Gs and in vibration as high as 20 Gs in each of three planes. Temperatures co-efficients of delay are 20 parts per million per degree C.

The delay lines are believed to be the first commercially available devices of their kind to use built-in microelectronic Read-Write amplifier circuits. (They also are available without these circuits). The microcircuits were specially developed for the Radio Receptor Division by General Instrument's Semiconductor Products Group.

The delay lines are presently available on a "custom" basis. Prices start at \$50 in small quantities (without Read-Write circuitry) and are substantially lower in larger quantities. End uses include computer, telemetry, radar, coder-decoder, navigational and other aerospace, missile and ground support applications where high precision delays are required.

Inquiries may be addressed to: Radio Receptor Division,
General Instrument Corporation, 174 Andrews Road, Hicksville, New York.

####

012765b